

phrase "means for unloosening". This has been corrected in the specification and claims to be a "means for loosening". Further, the Examiner questioned the initial means in claim 11. Apparently some confusion was generated in that the first means that is claimed actually does determine whether the user has removed the brace without loosening the tension setting and also operates the means for controlling the motor to loosen the cable. That is, the means are provided both for determining and for operating. It is respectfully submitted that this has been clarified. With respect to claim 12, the particular phrase in question has been amended to generally follow similar language utilized in claim 8. It is respectfully submitted that no new matter has been added by any of these formal amendments. Further, it is submitted that these amendments do not in any way change the scope of any of the claims in question. It is respectfully requested that this rejection be withdrawn.

Claims 1, 2, 4 and 6 were rejected under 35 U.S.C. § 103 as unpatentable over a combination of Stabholz taken in view of Bonin, Jr. et al while claim 10 was also rejected under the same combination further in view of Palmer. Any reapplication of these rejections would be vigorously traversed. It is considered that the Examiner has read too much into the references and has improperly combined the same.

Claim 1 is directed to a back brace apparatus comprising certain particular structure. A brace body adapted to be wrapped around the trunk of a patient is provided comprising two separate

segments. Means are provided at the end of each brace segment for allowing the two ends to be detachably connected together around the patients' trunk. Means are also provided for automatically tightening the brace comprising certain structure. This means comprises a cable operatively connected to the two segments, a motor operatively connected to apply tension to the cable, and means for controlling the motor. Claim 2 claims the further limitation wherein the brace segments are held together by the cable. Claim 4 claims the further limitation that the cable is run through at least one pulley mounted on one of the brace segments.

Claim 6 claims the basic back brace with further structure of a means for storing data including time and associated brace tension settings and brace tension together with a means for outputting the data for use by a health care professional.

Claim 10 contains the limitation that the means for allowing the two ends of the brace segments to be detachably connected together comprises a section of hook-and-loop fastener material on each of the ends.

The Examiner's rejection is traversed because it is believed that the Examiner is reading too much into the references. The Examiner is utilizing Stabholz as a "back brace" apparatus including a "brace body 11" adapted to be wrapped around the trunk of a patient with the "brace body" comprising two segments. It is respectfully that the brace body 11 in Stabholz is a single unitary structure and does not comprise separate segments as

specifically claimed. Further, the "body 11" is rigid steel support to which are attached belts tightened by ratchet mechanism 21. It is strongly contended that while the belt assembly 14 can comprise a standard automobile seat belt strap 18 one into which is provided with a conventional seat belt buckle which may be selectively attached to a conventional mating buckle catch plate on the support 11, this is not a teaching of two separate segments as claimed.

The Examiner has cited Bonin, Jr. et al to show a conventional use in the art of a motor and motor control means for applying tension in a cable to a body part. Bonin, Jr. et al does show a portable traction machine that is electronically controlled.

The Examiner's combination of these two references is respectfully traversed. In Stabholz, the portions 11 and 12 are steel supports to which are attached belts tightened by ratchet mechanisms 21. As long as the belt is snug, there is no teaching in the reference of any type of predetermined or even any particular tension setting for the belt. Rather, the apparatus of Stabholz operates by the ratchet and pawl arrangement 15 pushing on the rods 22 to separate the support 11 from the support 12 vertically. That is, the apparatus of Stabholz is a device for applying traction to a lumbar region. This is accomplished by pushing the two supports 11 and 12 away from each other.

Consequently, a more proper application of the teachings of Bonin, Jr. et al to Stabholz would be to extend a fixed rod from the lower support 12 possibly having a pulley somewhere near the

shoulder of the patient and have a cable running from the support 11 over the pulley and down to the tension controlling apparatus for pulleying them apart thereby applying traction or tension vertically to the lumbar region.

It is strongly contended that this is not a teaching or suggestion of what is claimed in the present invention. That is, even if the references were combinable, (there is no teaching of how to do so) they still would not teach the present invention as claimed.

Palmer teaches a posture improving device having separate belt segments with pads 76 and 78 on the ends thereof for attaching them together. The posture improving device includes the housing assembly and an apparatus therein which when the user assumes an incorrect posture, additional tension is placed on the belt segments resulting in the sounding of a buzzer. It is respectfully submitted that this reference does not cure any of the above noted deficiencies of the primary references utilized by the Examiner.

Accordingly, it is strongly contended that certain clear differences exist between the present invention as claimed and the prior art relied upon by the Examiner. Further, it is strongly contended that these differences are more than sufficient that the present invention would not have been obvious to a person having ordinary skill in the art at the time the invention was made viewing the prior art relied upon.

Consequently, the Examiner is respectfully requested to

withdraw the rejections, indicate allowability of application claims 1 - 16, and pass this case to issue.

In the event that this paper is not considered to be timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees which may be due with respect to this paper, may be charged to Counsel's Deposit Account 14-1060.

Respectfully submitted,

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